Tennessee’s Tools and Trainings for Healthcare-Associated Infection Reporting

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Tennessee Department of Health
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Disclosures

- Nothing to disclose
Abbreviations

- **ADC** – average daily census
- **APIC** – Association for Professionals in Infection Control and Epidemiology
- **CDI** – *Clostridium difficile* infection
- **CLABSI** – central line-associated bloodstream infection
- **IP** – infection preventionist
- **LTAC** – long-term acute care facility
- **MDRO** – multidrug-resistant organism
- **MRSA** – methicillin-resistant *Staphylococcus aureus*
- **SCA** – specialty care area (e.g., hematology/oncology unit)
- **SSI** – surgical site infection
<table>
<thead>
<tr>
<th>HAI or MDRO</th>
<th>Tennessee Requirements</th>
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</table>
| CLABSI | - Acute-care facilities with ADC ≥25 (all ICUs and SCAs)
- All LTACs, regardless of ADC |
| SSI | - All facilities performing CBGB, CBGC, and/or HPRO procedures (and CARD beginning July 1, 2011) |
| MRSA | MRSA LabID events (blood cultures only) FacWideIN and in the emergency department (ED)
- Acute-care facilities with ADC ≥25
- All LTACs, regardless of ADC |
| CDI | *C. difficile* LabID events in the ED and FacWideIN excluding neonatal ICUs and well baby nurseries
- Acute-care facilities with ADC ≥25
- All LTACs, regardless of ADC |
The Mathematics of Reporting

State NHSN reporting requirements
National (i.e., CMS) NHSN reporting requirements
Complexity of NHSN case determinations
All other diseases reportable to public health

+ All other job duties

A lot of work for IPs! (and potential data quality issues)

- Our goal: To develop a variety of cost-effective tools and trainings to aid IPs with HAI reporting
Development of Tools and Trainings

- Designed tools and trainings based on:
  - Common reporting questions and requests for instruction submitted to TDH
  - Data quality issues identified during data quality checks and validation
  - Reporting issues identified by CDC
  - Costs
  - Time and travel limitations (for trainings)
Reporting Issues in Tennessee

- Conferring rights to the TDH group
- Completing the monthly reporting plan, particularly for MDRO/CDAD module
  - Confusion between TDH, QSource, and Tennessee Center for Patient Safety requirements
- Entering MDRO/CDAD summary data
- Identifying HAIs, including MRSA and C. difficile LabID events
Tool: Step-by-Step Instructions

- With screen shots of the NHSN application
  - Conferring rights to TDH group (acute-care and LTAC)
  - Completing the MDRO/CDAD section of the monthly reporting plan
  - Entering MDRO/CDAD summary data
  - Identifying MRSA and C. difficile LabID events

![Tool Description](image-url)
Completing the "MDRO/CDAD Module" Section of the Monthly NHSN Reporting Plan
**Updated 8/24/2010**

<table>
<thead>
<tr>
<th>If reporting C. diff to...</th>
<th>Go to...</th>
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<tbody>
<tr>
<td>TDH - required for all inpatient facilities (defined as hospitals with an ADC of 25 or greater and LTAC facilities), regardless of participation in TCPS and/or Qsource</td>
<td>Page 2</td>
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<tr>
<td>If reporting MRSA to...</td>
<td>Go to...</td>
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<tr>
<td>TDH only</td>
<td>Page 3</td>
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<tr>
<td>TDH + TCPS/Qsource &quot;MRSA LabID Event – All Clinical Cultures&quot; for specific units</td>
<td>Page 4</td>
</tr>
<tr>
<td>TDH + TCPS &quot;MRSA LabID Event – All Clinical Cultures&quot; facility-wide inpatient</td>
<td>Page 6</td>
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</tbody>
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*Note:* This document only demonstrates how to complete the "MDRO/CDAD Module" section of the monthly reporting plan. Please see the "NHSN Enrollment – Administrative Set-Up" slides for more complete instructions for filling out the entire monthly reporting plan, including CLABSI and SSI.

Completing the Monthly Reporting Plan for C. difficile
(Required for all facilities, regardless of participation in TCPS and/or Qsource)

TDH will monitor C. diff facility-wide for inpatients and in the emergency department (ED) [select location].

1. Choose "FacWIDEIN = FacWIDEIN" from the "Locations" drop-down menu.
2. Choose "C. difficile" from the "Specific Organism Type" drop-down menu.
3. Check the "Lab ID Event All Specimens" box.

If your facility has an emergency department,

4. In a new row, choose "ED – Emergency Department" (or whatever name your facility assigned to your emergency department in NHSN) from the "Locations" drop-down menu.

5. Repeat steps 2 and 3 above.

![Diagram showing steps 1 to 5 for completing the monthly reporting plan for C. difficile](image-url)
Tool: Checklists

- For identifying HAIs based on NHSN definitions
- For facilities (enrolled or not enrolled in NHSN) to meet CMS IPPS requirements

Checklist for Preparing to Meet CMS IPPS Requirements - Enrolled Facilities

If your facility is participating in the CMS Hospital Inpatient Quality Reporting Program and has at least 1 ICU:

- Verify that your facility’s Primary Contact Info is correct in NHSN. Log in to NHSN, click “Facility” in the blue navigation bar, then click “Facility Info”. Edit contact information as needed before printing the new consent form (item #2).

- Print, sign, and return the new NHSN Agreement to Participate and Consent (now available).
  Note: Requires C-level and primary contact (see item #1) signatures.

- If your facility has not already done so, complete and sign the CMS Notice of Participation. Please go to http://qualitynet.org/dcs/ContentServer?c=Page&pagename=OnetPublic%2FPag e%2FQnetTier3&cid=1228759831420 for further instructions. Hospitals with a notice of participation on record do not need to submit a new notice of participation unless CMS determines a need for re-pledging.

- March 2011 (estimated): If you have not already done so, enter your facility’s CMS ID (CMS Certification Number, or CCN) as the facility identifier. Log in to NHSN, click “Facility” in the blue navigation bar, then “Facility Info”, and enter or edit the CMS ID.
BONE AND JOINT INFECTION (BJ)

BONE – Osteomyelitis

**DEFINITION:** Osteomyelitis must meet at least **ONE** of the following criteria:

- **Criterion 1:**
  - Patient has organisms cultured from bone

- **Criterion 2:**
  - Patient has evidence of osteomyelitis on direct examination of the bone during **ONE** of the following:
    - surgical operation
    - histopathologic examination

- **Criterion 3:**
  - Patient has at least **TWO** of the following signs or symptoms with no other recognized cause:
    - fever (>38°C)
    - localized swelling
    - tenderness
    - heat
    - drainage at suspected site of bone infection
  
    **AND**
  
    - at least **ONE** of the following:
      - organisms cultured from blood
      - positive blood antigen test (e.g. *H. influenzae, S. pneumoniae*)
      - radiographic evidence of infection (e.g. abnormal findings on x-ray, CT scan, MRI, radiolabel scan [gallium, technetium, etc]).

JNT – Joint or Bursa

**DEFINITION:** Joint or bursa infections must meet at least **ONE** of the following criteria:

- **Criterion 1:**
  - Patient has organisms cultured from **ONE** of the following:
    - joint fluid
    - synovial biopsy

- **Criterion 2:**
  - Patient has evidence of **ONE** of the following:
    - joint infection
    - bursa infection
  
    **seen during **ONE** of the following:**
    - surgical operation
    - histopathologic examination

- **Criterion 3:**
  - Patient has at least **TWO** of the following signs or symptoms with no other recognized cause:
    - joint pain
    - swelling
    - tenderness
BONE AND JOINT INFECTION (BJ)

- Heat
- Evidence of effusion
- Limitation of motion

AND

- At least ONE of the following:
  - Organisms and white blood cells seen on Gram stain of joint fluid
  - Positive antigen test on ONE of the following:
    - Blood
    - Urine
    - Joint fluid
  - Cellular profile and chemistries of joint fluid compatible with infection and not explained by an underlying rheumatologic disorder
  - Radiographic evidence of infection (e.g., abnormal findings on x-ray, CT scan, MRI, radiolabel scan [gallium, technetium, etc]).

DISC – Disc Space Infection

**Definition:** Vertebral disc space infection must meet at least ONE of the following criteria:

- **Criterion 1:**
  - Patient has organisms cultured from vertebral disc space tissue obtained during ONE of the following:
    - Surgical operation
    - Needle aspiration

- **Criterion 2:**
  - Patient has evidence of vertebral disc space infection seen during ONE of the following:
    - Surgical operation
    - Histopathologic examination

- **Criterion 3:**
  - Patient has BOTH
    - Fever (>38°C) with no other recognized cause
    - Pain at the involved vertebral disc space

  AND

  - Radiographic evidence of infection (e.g., abnormal findings on x-ray, CT scan, MRI, radiolabel scan [gallium, technetium, etc]).

- **Criterion 4:**
  - Patient has BOTH
    - Fever (>38°C) with no other recognized cause
    - Pain at the involved vertebral disc space

  AND

  - Positive antigen test (e.g., *H. influenzae*, *S. pneumoniae*, *N. meningitidis*, or Group B Streptococcus) on ONE of the following:
    - Blood
    - Urine
Tool: HAI Online Workspace

- Website where IPs and the TDH HAI team can join groups, share resources, and communicate with each other
  - Format similar to social networking sites
  - Network administrator approves membership requests
  - Hosted by Ning
  - Subscription cost = $200/year

- See poster: Crist, MB. Social networking for infection preventionists: a communication tool implemented by the Tennessee Department of Health. Abstract #1055436
Welcome, Brynn Berger!

What brings you here?

Update

Latest Activity

Brynn Berger replied to Brynn Berger's discussion 'Carbapenem-resistant Enterobacteriaceae (CRE)'

The new CRE fact sheet has just been uploaded as of 2/18
February 19

Brynn Berger replied to Brynn Berger's discussion 'CLABSI Case Study' in the group CLABSI Surveillance

Margaret, we asked for clarification from CDC, and you are correct! Here is CDC's reply: "Within NHSN the user is not required to attribute the CLABSI to an individual line. They simply answer "yes" to the field of whether or not a central line.
January 20

Brynn Berger replied to Brynn Berger's discussion 'Safe Injection and Blood Glucose Monitoring Practices - MDAG Presentation' in the group Infection Control Resources

"Now updated with a "scrub the hub" bullet point"
January 20
MRSA/CDI Surveillance

Created by Jennifer Ward

Send Message  View Groups

Information

Focus Group for implementation of MRSA and CDI surveillance in TN
Location: State-wide
Members: 50
Latest Activity: 19 hours ago

Share  Twitter  Facebook

Focus Group for MRSA/CDI Surveillance

If you are interested in participating in a focus group to develop best practices around MRSA and CDI surveillance, specifically use of hospital information systems to identify Laboratory ID Events for NHSN, please sign up at the following link: https://www.surveymonkey.com/s/KYK775P. Tips, tools, and guidelines developed will be shared with all HAI partners in TN.

Discussion Forum

Post discharge C.diff  2 Replies

Not sure whether to report this C.diff infection through NHSN or not. Pt. had a C.diff culture collected at the nursing home on 5/4/11. Patient had been an inpatient at my facility from 4/27-5/2. P...

Started by  Last reply by  19 hours ago.

MRSA  3 Replies

I am still confused about the NHSN reporting for bloods. Here is my scenario which has occurred three times in July. Pt. has blood drawn in ER and admitted to the floor same day – do I have to ente...

All Events (9)

**June 20**
Monday

**NHSN State User Call with Dr. Kainer**
June 20, 2011 from 10am to 11am - TDH
The NHSN state user call hosted by Dr. Kainer is held the third Monday of each month at 10AM CST. The call-in number is 615-253-6919 or 1800-404-8216.
Organized by Crystal Johnson Brockman | Type: monthly, meeting
You have not responded.

**June 24**
Friday

**Multi-Disciplinary Advisory Group Meeting**
June 24, 2011 from 11am to 3pm - Nashville, TN
The MDAG meeting will take place in Nashville, TN on Friday, June 24 from 11:00 AM – 3:00 PM CT. The MDAG members will receive additional information about the meeting by email.
Organized by Dr. Marion Kainer | Type: meeting
You have not responded.

**July 18**
Monday

**NHSN State User Call with Dr. Kainer**
July 18, 2011 from 10am to 11am - TDH
The NHSN state user call hosted by Dr. Kainer is held the third Monday of each month at 10AM CST. The call-
Trainings

- May 2010 – TDH staff held all-day, in-person trainings in each of Tennessee’s 3 Grand Divisions
  - Preparing for requirements taking effect July 1, 2010
  - Topics: NHSN enrollment, facility set-up, CLABSI, SSI, MRSA and *C. difficile* LabID event reporting
  - Lunches provided by local APIC chapters
- Ongoing – webinars on specific topics
  - Can sometimes be combined with a local training
  - Relevant topics (i.e., CMS IPPS) and IP requests
Outcomes and Challenges

- **Outcomes:**
  - IPs gave positive feedback about the tools and trainings
  - IPs are better equipped to handle reporting requirements
  - HAI staff gained knowledge about NHSN functions

- **Challenges**
  - Staff turnover
  - Costs of in-person trainings
  - Even step-by-step instructions don’t fix all problems!
Acknowledgements

- Marion Kainer
- Matthew Crist
- HAI team
Thank You!

- Brynn.E.Berger@tn.gov
  615-741-2005